

REMARKS

Claims 1-14 are pending in this application. By this Amendment, claims 1-12 and 14 are amended. The amendments introduce no new matter because they are made to correct informalities, or are supported at least by the claims as originally filed. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

Applicant appreciates the courtesies shown to Applicant's representative by Examiner Fischer in the August 29, 2007 personal interview. Applicant's separate record of the substance of the interview is incorporated into the following remarks.

Claim 11 is rejected under 35 U.S.C. §112, second paragraph. This rejection is respectfully traversed.

The Office Action asserts that there is no antecedent basis for the words "said stiffener rubber" recited in claim 11. Claim 11 is amended to obviate the rejection.

Accordingly, reconsideration and withdrawal of the §112 rejection of claim 11 are respectfully requested.

Claims 1-7, 9, 10 and 12-14 are rejected under 35 U.S.C. §103(a) over Ogawa (U.S. Patent No. 6,929,045) in view of Cottrell (U.S. Patent Application Pub. No. 2005/0230021)¹. This rejection is respectfully traversed.

For at least two reasons, Applicant submits that claim 1 would not have been rendered obvious by any permissible combination of Ogawa and Cottrell. First, the applied references cannot reasonably be considered to teach, or to have suggested, "an inner end in the tire's

¹ Examiner Fischer acknowledged that U.S. Patent No. 6,929,045 to Ogawa is not by "another," and thus agreed that Ogawa does not qualify as prior art. Applicant's arguments are in response to Examiner Fischer's assertion that the foreign related Japanese patent application JP-A-10-246820 to Ogawa qualifies as prior art against the present application under 35 U.S.C. §102(b), and Ogawa in combination with Cottrell would have suggested, the features recited in claim 1.

radial direction of the split bead core located outside as viewed from the tire's width direction is so placed that a vertical distance from a tire bead base or its extension is not more than 5 mm" as recited in independent claim 1. Second, the specific range of the claimed vertical distance is critical.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981 (CCPA 1974). Applicant submits that the applied art does not teach, nor would it have suggested, all of the claimed features.

Specifically, the combination of Ogawa and Cottrell cannot reasonably be considered to teach, or to have suggested, "an inner end in the tire's radial direction of the split bead core located outside as viewed from the tire's width direction is so placed that a vertical distance from a tire bead base or its extension is not more than 5 mm," as recited in independent claim 1.

With respect to the rejection of claim 2, whose subject matter has been incorporated into claim 1, the Office Action acknowledges that the combination of Ogawa and Cottrell does not disclose this feature. Nevertheless, the Office Action alleges that based on the drawings of Ogawa, one of ordinary skill in the art would have expected the bead core to be positioned within the range of the claimed invention. Examiner Fischer indicated during the August 29 personal interview that it is well known to one of ordinary skill in the art of tires that the vertical distance from a tire bead base to an inner end of the tire's split bead core is never more than 5mm. However, Applicant respectfully disagrees with these assertions.

Ogawa is silent as to the dimensions of the claimed features as well as the dimensional relationship of various structural features. Furthermore, no objective evidence of record has been shown to support the Examiner's assertion that one of ordinary skill in the art would have expected the bead core to be positioned within the range of the claimed invention.

Additionally, no basis is provided, by objective evidence, to show that the vertical distance feature recited in pending claim 1 is a result-effective variable. Ogawa is completely silent as to any benefit or "result" achieved by adjusting the dimension of the claimed vertical distance. Such a showing is a necessary precondition "before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation." See MPEP §2144.05 II. B. citing *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

Accordingly, at least because the combination of Ogawa and Cottrell are conceded as failing to suggest the claimed vertical distance and no objective evidence is provided to support the assertion of what one of ordinary skill in the art would have known regarding this feature, at least this feature of claim 1 is not rendered obvious by any permissible combination of the applied references.

The assertion that Applicant has not shown the criticality of the claimed range is without merit. There are many instances in Applicant's specification in which the criticality of the claimed vertical distance is discussed.

For example, page 2, lines 22-29 of Applicant's specification discusses the issue of distance between a radially innermost end of a split bead and the tire bead base. Furthermore, page 10, lines 3-9 and line 28 through page 11, line 1 of Applicant's specification, provides that Applicant's claimed dimensions and dimensional relationships exist to overcome the problems of the prior art, lending further support for the conclusion that one of ordinary skill in the art would not have recognized that the claimed feature is never outside the claimed range as asserted in the Office Action. Specifically, page 10, lines 3-9 and page 10, line 28 through page 11, line 1, provide that as the vertical distance between the radially innermost end of the split bead core 14 and the tire bead base 17 or its extension is set to 5 mm or less, the stiffness near the bead heel portion 18 becomes higher. Applicant's specification further

provides that "as a result, even when the inner pressure decreases, the lower part of the bead portion 5 is less deformed and thus the bead portion 5 exerts a sufficient engagement force against the rim of the wheel (not shown) so that the bead is effectively prevented from coming off (page 10, lines 6-9).

Accordingly, in view of Applicant's specification, the particular claimed range is shown to be critical and not limited by what is considered "well known" by those of ordinary skill in the art.

For the totality of the above discussion, this feature positively recited in independent claim 1 has not been properly shown to be rendered obvious in view of the prior art. Claims 2-7, 9, 10 and 12-14 depend from claim 1 and are, therefore, also not rendered obvious over the prior art for at least this dependence, as well as for the separately patentable subject matter that each of these claims recites.

Accordingly, reconsideration and withdrawal of the rejection of claims 1-7, 9, 10 and 12-14 under 35 U.S.C. §103(a) are respectfully requested.

Claims 1, 8 and 11 are rejected under 35 U.S.C. §103(a) over Ueyoko (U.S. Patent No. 5,885,387) in view of Cottrell. This rejection is respectfully traversed.

As agreed by Examiner Fischer during the August 29 personal interview, the combination of Ueyoko and Cottrell cannot reasonably be considered to teach, or to have suggested, "wherein the bead includes a pair of split bead cores," as recited in independent claim 1.

Thus, for at least this reason, Applicant requests withdrawal of the rejection of independent claim 1 over the combination of Ueyoko and Cottrell. Claims 8 and 11 depend from claim 1. Accordingly, Applicant requests withdrawal of the rejection of these claims, for at least the reasons discussed above, as well as for the additional features these claims recite.

In view of at least the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-14 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:
Petition for Extension of Time

Date: September 7, 2007

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